REMARKS

Claims 1-18, 20, 27-39, 42-47, 50-58 and 61-88 are pending in the above-captioned patent application after this amendment. Claims 1-3, 5, 8-23, 25 and 27-70 have been rejected. The Applicants respectfully traverse the rejection of claims 11-18, 20 and 43-47. Further, claims 1, 27-34, 50, 53 and 61 have been amended, claims 19, 21-23, 25, 40-41, 48-49 and 59-60 have been canceled without prejudice, and new claims 71-88 have been added by this amendment for the purpose of expediting the patent application process in a manner consistent with the goals of the Patent Office pursuant to 65 Fed. Reg. 54603 (September 8, 2000), even though the Applicants believe that the previously pending claims were allowable.

Support for the amendments to the claims and to the new claims can be found throughout the originally filed specification, in the drawings and in the claims. More specifically, support for the amendments to claims 1, 27-34, 50, 53 and 61 and for new claims 71-88 can be found at least in Figures 3-20C, and in the specification at page 8, line 11 through page 16, line 31.

Additionally, the undersigned attorney for the Applicants notes that Deposit Account No. 50-1141 was not charged for the Applicants' previous Response to Office Action dated February 19, 2003, which was filed on March 13, 2003, by facsimile. Therefore, the undersigned attorney authorizes the Patent Office to charge $264.00 for the prior response to Deposit Account No. 50-1141.

No new matter is believed to have been added by this amendment. Consideration of the Application is respectfully requested.

Interview Summary

On January 5, 2004, the undersigned attorney for the Applicants conducted a telephonic interview with the Examiner, Dan Jenkins. Prior to the interview, a draft Amendment and Response was faxed to the Examiner for review. During the interview, claim language was discussed which would place the application in condition for allowance. The claims presented herein are

consistent with the claim language discussed during the interview. The Applicants and the undersigned attorney wish to thank the Examiner for his time and assistance during the interview.

Rejections under 35 U.S.C. §112, First Paragraph

Claims 61-70 are rejected under 35 U.S.C. §112, first paragraph, as "failing to comply with the written description requirement." The Patent Office states that the "claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 61 contains a limitation to 'an orientating device that is at least partially positioned directly between the upper punch and the lower punch,'. The Examiner finds no support for this limitation. In particular, the orientating device is fully positioned directly between the upper punch and the lower punch (see Fig. 19). The Examiner recommends the language – an orientating device that is positioned directly between the upper punch and the lower punch, --.".

During the interview, the Examiner indicated that the term "directly" does not need to be included in the claim as originally suggested. Although the Applicants do not agree with the rejection by the Patent Office, claim 61 has been amended for the purpose of expediting the patent application process as provided above. Consequently, amended claim 61 is believed to be patentable. Because claims 62-70 depend directly or indirectly from claim 61, they are also believed to be patentable.

Rejections Under 35 U.S.C. § 102

Claims 1-3, 5, 8-23, 25 and 27-60 are rejected under 35 U.S.C. § 102(b) as being anticipated by Toulmin, Jr. (US 2,384,915). Claims 19, 21-23, 25, 40-41, 48-49 and 59-60 have been canceled without prejudice. Thus, the rejection of claims 19, 21-23, 25, 40-41, 48-49 and 59-60 is believed to be moot.

Additionally, the Applicants respectfully traverse the rejection of claims 11-18, 20 and 43-47 on the grounds that Toulmin, Jr. does not teach or suggest the features of the rejected claims. For example, Toulmin, Jr. is directed toward powder metallurgy which subjects metal in powder form to a magnetic field and thereafter to the action of supersonic vibration prior to a pressing operation. (Col. 1, lines 10-14). The magnetic field aligns the particles of powder metal in an even orderly arrangement. (Col. 1, lines 14-17).

More specifically, as shown in Figure 1, current is carried to elements 18, which produce magnetic fields 19 which cause the alignment of the metal particles 20 in perpendicular relationship in a mold cavity 15. (Col. 2, lines 28-34). In Figure 2, coils on opposite sides of the mold 14 create magnetic fields 19' which are arranged so that the metal particles 20 are caused to align themselves in horizontal relationship in the mold cavity 15. (Col. 2, lines 34-38). Thus, the metal particles are either arranged perpendicularly or horizontally. As used in Toulmin, Jr., the terms "perpendicular" and "horizontal" are illustrated as being orthogonal to each other, e.g. perpendicular to one another.

Importantly, Toulmin, Jr. does not teach or suggest that the metal particles are arranged at an angle other than perpendicular or horizontal. Moreover, Toulmin, Jr. does not teach or suggest that the metal particles are arranged to have more than one orientation, i.e. perpendicular and at an angle relative to the perpendicular, or horizontal and at an angle to the horizontal, etc.

In contrast to Toulmin, Jr., claim 11 is directed toward a "fixture for manufacturing a permanent magnet ... the first region having a first region axis which extends between a north pole and a south pole of the first region, the fixture comprising: a fixture body including a fixture cavity which is adapted to receive the magnet powder; and an orientating device adapted for aligning a portion of the magnet powder in the fixture cavity to form a powder pattern in the magnet body having second region powder lines in at least a portion of the second region which are angled relative to the first region axis." These features are not taught or suggested by the cited reference. Thus, claim 11 is believed to

be patentable. Because claims 12-18, 20, 42-47, and new claims 83-84 depend directly or indirectly from claim 11, they are likewise believed to be patentable.

Further, claims 1, 27-34, 50 and 53 have been amended. As amended, these claims are believed to be patentable in view of Toulmin, Jr. For example, Toulmin, Jr. discloses an apparatus including a pair of elements 18 that are positioned on either side of the mold cavity 15. (Figures 1-5). In other words, the elements 18 are positioned immediately adjacent two opposite sides of the mold cavity 15.

In contrast to Toulmin, Jr., amended claim 1 is directed toward a "manufacturing fixture for manufacturing a magnet from a magnet powder, the magnet including a north pole, a south pole and a first region axis which extends between the north pole and the south pole, the manufacturing fixture comprising: a fixture body including a fixture cavity for receiving the magnet powder, the fixture cavity having a cavity axis which is substantially parallel with the first region axis when the magnet powder is in the fixture cavity, the fixture cavity including a first region; and an orientating device adapted to create a magnetic field having flux lines which extend through a portion of the fixture cavity, wherein a portion of the flux lines in the first region of the fixture cavity align a portion of the magnet powder to be substantially parallel to the cavity axis, and a portion of the magnet powder to be angled relative to the cavity axis." These features are not taught or suggested by Toulmin, Jr. Thus, claim 1 is considered to be patentable. Because claims 2-10 depend directly or indirectly from claim 1, they are also considered to be patentable.

Amended claim 27 is directed toward a "manufacturing fixture ... comprising: a fixture body including defining a fixture cavity that receives the magnet powder, the fixture cavity having a first side and a second side opposite the first side; and an orientating device that is positioned near only one side of the fixture cavity, the orientating device that creates creating a magnetic field having flux lines that extend through into the fixture cavity, wherein a portion of the flux lines in the fixture cavity are angled relative to the first region axis when the magnet powder is in the fixture cavity." These features are not taught or

suggested by Toulmin, Jr. Thus, claim 27 is considered to be patentable. Because claims 28-33, 50-52 and new claim 85 depend directly or indirectly from claim 27, they are also considered to be patentable.

In addition, amended claim 34 is directed toward a "method for manufacturing a magnet ... comprising the steps of: providing a fixture cavity; positioning the magnet powder in the fixture cavity; and creating flux lines which extend into the fixture cavity, wherein a portion of the flux lines in the fixture cavity align a portion of the magnet powder to be angled relative to the first region axis." As provided above, these features are not taught or suggested by Toulmin, Jr. Thus, claim 34 is considered to be patentable. Because claims 35-39 and new claims 86-87 depend directly or indirectly from claim 34, they are also believed to be patentable.

Amended claim 53 is directed toward a "fixture for manufacturing a magnet from a magnet powder, the manufacturing fixture comprising: a fixture body defining a fixture cavity for receiving the magnet powder, the fixture cavity having a cavity axis, the fixture cavity including an upper side and a lower side that are positioned substantially perpendicular to the cavity axis, the upper side and the lower side being substantially planar; and an orientating device positioned near only one of the sides of the fixture cavity, the orientating device generating a magnetic field having flux lines which extend through a portion of the fixture cavity, wherein a portion of the flux lines in the fixture cavity are angled relative to the remaining flux lines in the fixture cavity." These features are not taught or suggested by Toulmin, Jr. Thus, claim 53 is considered to be patentable. Because claims 54-58 depend directly or indirectly from claim 53, they are also believed to be patentable.

Accordingly, the rejection of claims 11-18, 20, 27-39, 42-47 and 50-58 should be withdrawn and these claims should be allowed.

NEW CLAIMS

New claims 71-88 have been added by this amendment pursuant to the suggestion of the Patent Office. New claims 71-88 are of a slightly different

scope than the previously pending claims. However, new claims 71-88 are believed to be patentable in view of the cited references.

In addition to the explanation of Toulmin, Jr. provided above, the cited reference discloses an apparatus including a pair of elements 18 that are positioned on either side of the mold cavity 15. (Figures 1-5). Further, the apparatus includes a pair of pistons 11, 13 that press the metal particles together. No portion of the elements 18 are positioned directly between the pistons 11, 13. Stated another way, Toulmin, Jr. does not teach or suggest that the elements are at least partially positioned directly between the upper piston 13 and the lower piston 11.

New claim 71 is directed toward a "manufacturing fixture for manufacturing a magnet using a magnet powder, the magnet including a north pole, a south pole and a first region axis, the first region axis extending between the north pole and the south pole, the manufacturing fixture comprising: an upper punch; a lower punch; a fixture body defining a fixture cavity that receives the magnet powder; and an orientating device that is at least partially positioned directly between the upper punch and the lower punch, the orientating device creating a magnetic field having flux lines that extend through the fixture cavity, wherein a portion of the flux lines in the fixture cavity are angled relative to the first region axis when the magnet powder is in the fixture cavity." These features are not taught or suggested in the cited references. Therefore, claim 71 is believed to be patentable. Because claims 72-82 depend directly or indirectly from claim 71, they are likewise believed to be patentable.

Further, new claims 83-84 depend from claim 11, new claim 85 depends from claim 27, new claims 86-87 depend from claim 34, and new claim 88 depends from claim 61. As explained above, these claims are considered to be patentable.

CONCLUSION

In conclusion, Applicants respectfully assert that claims 1-18, 20, 27-39, 42-47, 50-58 and 61-88 are patentable for the reasons set forth above, and that the application is now in a condition for allowance. Accordingly, an early notice of allowance is respectfully requested. The Examiner is requested to call the undersigned at 858-456-1951 for any reason that would advance the instant application to issue.

Dated this 6th day of January, 2004.

Respectfully submitted,

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